

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

#### **Listing of Claims:**

1. -15. (Canceled)
16. (Currently Amended) ~~The surgical microscope system as defined in Claim 13, further comprising~~ A surgical microscope system for observing an eye of a patient, the surgical microscope system comprising:
  - a surgical microscope having an observation beam path and a main objective in the observation beam path;
  - a beam splitter in the observation beam path;
  - a retinal diagnostic device having a digital retinal camera and a camera beam path separated from the observation beam path by the beam splitter, the camera beam path leading to the digital retinal camera, wherein the retinal diagnostic device includes a retinal lens in the observation beam path between the beam splitter and the patient's eye, the retinal lens being movable into and out of the observation beam path at a location between the main objective and the patient's eye; and
  - a beam transposer movable into and out of the observation beam path at a location between the main objective and the patient's eye.
17. (Previously Presented) The surgical microscope system as defined in Claim 16, further comprising a pivoting-in apparatus carrying the retinal lens and the beam transposer, whereby the retinal lens and the beam transposer can be pivoted into and out of the observation beam path.
18. (Previously Presented) The surgical microscope system according to Claim 16, further comprising an auxiliary lens movable into and out of the observation beam path at a location between the main objective and the patient's eye.

19. (Previously Presented) The surgical microscope system as defined in Claim 18, further comprising a pivoting-in apparatus carrying the retinal lens, the beam transposer, and the auxiliary lens, whereby the retinal lens the beam transposer, and the auxiliary lens can be pivoted into and out of the observation beam path.

20.-23. (Canceled)

24. (Currently Amended) ~~The surgical microscope system as defined in Claim 23, further A~~  
surgical microscope system for observing an eye of a patient, the surgical microscope system comprising:  
    a surgical microscope having an observation beam path;  
    a beam splitter in the observation beam path;  
    a retinal diagnostic device having a digital retinal camera and a camera beam path separated from the observation beam path by the beam splitter, the camera beam path leading to the digital retinal camera;  
    a microscope illumination system associated with the surgical microscope;  
    a first light guide arranged to provide transscleral retinal illumination;  
    an illumination source connected to the microscope illumination system and to the first light guide to selectably provide illumination light to either of the microscope illumination system and the first light guide;  
    a second light guide arranged to deliver light to the microscope illumination system; and  
    an optical light branching switch connecting the first light guide and the second light guide to the illumination source, whereby light from the illumination source can be switched between the first light guide for use in transscleral retinal illumination and the second light guide for use in microscope illumination system.

25. (Previously Presented) The surgical microscope system as defined in Claim 24, further comprising a computer connected to the optical light branching switch for controlling the optical light branching switch.

26. (Previously Presented) The surgical microscope system as defined in Claim 25, wherein the surgical microscope includes a main objective in the observation beam path and the retinal diagnostic device includes a retinal lens, a beam transposer, and an auxiliary lens movable into and out of the observation beam path between the main objective and the patient's eye, wherein the retinal lens, the beam transposer, and the auxiliary lens are carried into and out of the observation beam path by a mechanism controlled by computer.
27. (Previously Presented) A surgical microscope system for observing an eye of a patient, the surgical microscope system comprising:  
a surgical microscope having an observation beam path and a stereo tube on the observation beam path;  
a beam splitter spaced from the stereo tube in the observation beam path; and  
a retinal diagnostic device having a digital retinal camera and a camera beam path from the beam splitter to the digital retinal camera, the retinal diagnostic device further having a beam transposer removably installed in the observation beam path between the stereo tube and the beam splitter.
28. (Previously Presented) The surgical microscope system as defined in Claim 27, wherein further comprising a computer for controlling installation of the transposer in the observation beam path.